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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/723,916

Applicant(s)

NARJALA ET AL.

Examiner

Jay P. Patel

Art Unit

2619

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 1125/2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-5, 7, 9-11 and 13-17 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-5, 7, 9-11 and 13-17 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 25 November 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This office action is in response to the claims filed on 8/24/2007.
2. Claims 1-5, 7, 9-11 and 13-17 are pending.
3. Claims 6, 8, 12 and 18-24 have been cancelled.

Claim Objections

4. Claim 9 is objected to because of the following informalities: It depends on cancelled claim 8. Appropriate correction is required.

Claim Rejections - 35 USC § 103

5. Claims 1-5, 7, 9-11 and 13-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lee (US Patent 7047561 B1) in view of Inoue et al. (US Patent 6167513).

In regards to claim 1, Lee shows in figure 5 a packet processing method to using a firewall in association with real-time Internet applications. After layer 3 and layer 4 processing is carried out at step 515, at step 520 the packet is split into TCP and UDP data. The process of figure 5 is carried out according to the functions of the network layers in figure 2, where layers 7 through 3 implement packet filter policy (establishing a policy manager).

Subsequently in steps 550 and 555, packet filtering is applied (examining the packet via one or more filters in the policy manager). In further regards, figure 1 illustrates a schematic diagram of a computer network including a hybrid firewall 100 inclusive of packet filter 106. The packet filter 106 examines packets at layer 3 and layer 4 to selectively control the flow of data to and from networks 110 and 120. Packet

filter 106, will follow predetermined security rules that specify which types of packets to allow to pass and which types of packets to block (see column 4, lines 40-45) (filter to examine a type of packet).

Furthermore, packets are allowed or blocked based on layer 3 information such as destination IP address (see column 4, lines 46-50) (a second filter to examine a destination address).

Returning to figure 5, if at step 555, a packet is allowed to pass through; at subsequent steps 560 and 565, TCP and IP headers are respectively added (informing a driver whether to modify the packet).

At step 565, an IP header is added to outgoing packet (determine whether a mobile IP header is to be associated with the packet).

In further regards to claim 1, Lee fails to teach, the filtering policies being applied on a mobile node using a mobile IP protocol. Inoue teaches the above-mentioned limitation in figure 3 where a mobile IP network is shown with gateways 4a-4c and a mobile node 2. Furthermore, since a mobile IP network exists, Inoue is also reads on transmitting a packet via a mobile node (see figure 36, arrow going from MN 2 to CH3). The gateways, carryout filtering according to prescribe security policies for the mobile node (see column 11, lines 19-23).

Therefore, it would have been obvious to one skilled in the art at the time the invention was made to incorporate the firewall processing method taught by Lee into a security policy implement by the gateways in the mobile IP network disclosed by Inoue.

The motivation to do so would be to provide security for real time applications that use mobile IP.

In regards to claim 2, Lee shows in steps 565 an IP header added to a packet.

In regards to claim 3, Lee in combinations with Inoue teaches all the limitations of parent claims 1 and 2. Lee fails to show new source and destination addresses being added to an IP header. Inoue however shows in figure 7, an inner IP header being added with a new source and destination addresses.

Therefore, it would have been obvious to one skilled in the art at the time the invention was made to incorporate the firewall processing method taught by Lee into a security policy implement by the gateways in the mobile IP network disclosed by Inoue. The motivation to do so would be to provide security for real time applications that use mobile IP.

In regards to claim 4, figure 1 illustrates a schematic diagram of a computer network including a hybrid firewall 100 inclusive of packet filter 106. The packet filter 106 examines packets at layer 3 and layer 4 to selectively control the flow of data to and from networks 110 and 120. Packet filter 106, will follow predetermined security rules (criteria) that specify which types of packets to allow to pass and which types of packets to block (see column 4, lines 40-45) (filter to examine a type of packet).

In regards to claim 4 and in regards to claim 5, Lee shows in step 520, the data being split into TCP and UDP data and in steps 550 and 560, UDP packet filtering policy is applied.

In regards to claim 7, Lee shows in figure 5 a packet processing method to using a firewall in association with real-time Internet applications. After layer 3 and layer 4 processing is carried out at step 515, at step 520 the packet is split into TCP and UDP data. The process of figure 5 is carried out according to the functions of the network layers in figure 2, where layers 7 through 3 implement packet filter policy (establishing a policy manager).

Subsequently in steps 550 and 555, packet filtering is applied (examining the packet via one or more filters in the policy manager). In further regards, figure 1 illustrates a schematic diagram of a computer network including a hybrid firewall 100 inclusive of packet filter 106. The packet filter 106 examines packets at layer 3 and layer 4 to selectively control the flow of data to and from networks 110 and 120. Packet filter 106, will follow predetermined security rules that specify which types of packets to allow to pass and which types of packets to block (see column 4, lines 40-45) (filter to examine a type of packet).

Furthermore, packets are allowed or blocked based on layer 3 information such as destination IP address (see column 4, lines 46-50) (a second filter to examine a destination address).

Returning to figure 5, if at step 555, a packet is allowed to pass through; at subsequent steps 560 and 565, TCP and IP headers are respectively added (informing a driver whether to modify the packet).

At step 565, an IP header is added to outgoing packet (determine whether a mobile IP header is to be associated with the packet).

In further regards to claim 7, Lee fails to teach, the filtering policies being applied on a mobile node using a mobile IP protocol. Inoue teaches the above-mentioned limitation in figure 3 where a mobile IP network is shown with gateways 4a-4c and a mobile node 2. Furthermore, since a mobile IP network exists, Inoue is also reads on transmitting a packet via a mobile node (see figure 36, arrow going from MN 2 to CH3). The gateways, carryout filtering according to prescribe security policies for the mobile node (see column 11, lines 19-23).

Therefore, it would have been obvious to one skilled in the art at the time the invention was made to incorporate the firewall processing method taught by Lee into a security policy implement by the gateways in the mobile IP network disclosed by Inoue. The motivation to do so would be to provide security for real time applications that use mobile IP.

In regards to claim 9, Lee in combinations with Inoue teaches all the limitations of parent claim 7. Lee fails to show new source and destination addresses being added to an IP header. Inoue however shows in figure 7, an inner IP header being added with a new source and destination addresses.

Therefore, it would have been obvious to one skilled in the art at the time the invention was made to incorporate the firewall processing method taught by Lee into a security policy implement by the gateways in the mobile IP network disclosed by Inoue. The motivation to do so would be to provide security for real time applications that use mobile IP.

In regards to claims 10 and 11, Lee shows in step 520, the data being split into TCP and UDP data and in steps 550 and 560, UDP packet filtering policy is applied and at step 570, packet is send out.

In regards to claim 13, Lee shows in figure 5 a packet processing method to using a firewall in association with real-time Internet applications. After layer 3 and layer 4 processing is carried out at step 515, at step 520 the packet is split into TCP and UDP data. The process of figure 5 (undertaken by firewall 100 of figure 1) is carried out according to the functions of the network layers in figure 2, where layers 7 through 3 implement packet filter policy (a policy manager).

Subsequently in steps 550 and 555, packet filtering is applied (examining the packet via one or more filters in the policy manager). In further regards, figure 1 illustrates a schematic diagram of a computer network including a hybrid firewall 100 inclusive of packet filter 106. The packet filter 106 examines packets at layer 3 and layer 4 to selectively control the flow of data to and from networks 110 and 120. Packet filter 106, will follow predetermined security rules that specify which types of packets to allow to pass and which types of packets to block (see column 4, lines 40-45) (filter to examine a type of packet).

Furthermore, packets are allowed or blocked based on layer 3 information such as destination IP address (see column 4, lines 46-50) (a second filter to examine a destination address).

Returning to figure 5, if at step 555, a packet is allowed to pass through; at subsequent steps 560 and 565, TCP and IP headers are respectively added (a driver capable of receiving instructions from the policy manager to modify the packet).

At step 565, an IP header is added to outgoing packet (determine whether a mobile IP header is to be associated with the packet).

In further regards to claim 13, Lee fails to teach, the filtering policies being applied on a mobile node using a mobile IP protocol. Inoue teaches the above-mentioned limitation in figure 3 where a mobile IP network is shown with gateways 4a-4c and a mobile node 2. Furthermore, since a mobile IP network exists, Inoue is also reads on transmitting a packet via a mobile node (see figure 36, arrow going from MN 2 to CH3). The gateways, carryout filtering according to prescribe security policies for the mobile node (see column 11, lines 19-23).

Therefore, it would have been obvious to one skilled in the art at the time the invention was made to incorporate the firewall processing method taught by Lee into a security policy implement by the gateways in the mobile IP network disclosed by Inoue. The motivation to do so would be to provide security for real time applications that use mobile IP.

In regards to claim 14, Lee shows in steps 565 an IP header added to a packet.

In regards to claim 15, Lee in combinations with Inoue teaches all the limitations of parent claims 13 and 14. Lee fails to show new source and destination addresses being added to an IP header. Inoue however shows in figure 7, an inner IP header being added with a new source and destination addresses.

Therefore, it would have been obvious to one skilled in the art at the time the invention was made to incorporate the firewall processing method taught by Lee into a security policy implement by the gateways in the mobile IP network disclosed by Inoue. The motivation to do so would be to provide security for real time applications that use mobile IP.

In regards to claim 16, figure 1 illustrates a schematic diagram of a computer network including a hybrid firewall 100 inclusive of packet filter 106. The packet filter 106 examines packets at layer 3 and layer 4 to selectively control the flow of data to and from networks 110 and 120. Packet filter 106, will follow predetermined security rules (criteria) that specify which types of packets to allow to pass and which types of packets to block (see column 4, lines 40-45) (filter to examine a type of packet).

In further regards to claim 16 and in regards to claim 17, Lee shows in step 520, the data being split into TCP and UDP data and in steps 550 and 560, UDP packet filtering policy is applied.

Response to Arguments

6. Applicant's arguments filed 8/24/2007 have been fully considered but they are not persuasive. The examiner believes that Lee and Inoue in combination do indeed teach all the features of the independent claims pending.

Conclusion

7. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jay P. Patel whose telephone number is (571) 272-3086. The examiner can normally be reached on M-F 9:00 am - 5:00 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edan Orgad can be reached on (571) 272-7884. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2619

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

JPP 11/18/07
Jay P. Patel
Examiner
Art Unit 2619

EDAN . ORGAD
SUPERVISORY PATENT EXAMINER
